AMENDMENTS TO THE CLAIMS:

This listing of claims will replace all prior versions and listings of claims in the application:

1.   (Currently amended) A method for enabling a network between a first processor and a second processor using at least one additional processor separate from the first processor and the second processor, wherein the first processor and the second processor are each identifiable by a name, the method comprising ~~the steps of~~:

receiving, at the at least one additional processor, on behalf of the first processor, information that includes the name of the second processor;

receiving, at the at least one additional processor, on behalf of the second processor, information that includes the name of the first processor;

determining, by the at least one additional processor, a first virtual address for the first processor based on the information received on behalf of the second processor and a second virtual address for the second processor based on the information received on behalf of the first processor, such that the first and second virtual addresses uniquely identify the first and second processors, respectively~~, and are routable through the network~~; and

providing, by the at least one additional processor, to the first processor the second virtual address and to the second processor the first virtual address to enable one or more tunnels between the first and the second processors.

2.   (Currently amended) The method of claim 1, further comprising ~~the step of~~:

establishing, by the first processor, one or more tunnels from the first processor to the second processor using the first and second virtual addresses.

3. (Currently amended) The method of claim 2, wherein ~~the step of~~ establishing, by the first processor, one or more tunnels from the first processor to the second processor, comprises ~~the step of~~:

establishing, by the first processor, one or more tunnels through a base network from the first processor to the second processor using the first and second virtual addresses.

4. (Currently amended) The method of claim 3, wherein ~~the step of~~ establishing, by the first processor, one or more tunnels through a base network from the first processor to the second processor, includes ~~the step of~~:

establishing, by the first processor, one or more tunnels through a base network from the first processor to the second processor using the first and second virtual addresses.

5. (Original) The method of claim 1, wherein each of the names includes a first portion and a second portion.

6. (Currently amended) The method of claim 1, further comprising ~~the steps of~~:

establishing a tunnel between the first processor and the at least one additional processor to communicate information between the first processor and the at least one additional processor.

7. (Currently amended) The method of claim 6, wherein in ~~the step of~~ receiving, at the at least one additional processor, information on behalf of the first processor, comprises ~~the step of~~:

receiving, at the at least one additional processor, the information on behalf of the first processor through the tunnel established between the first processor and the at least one additional processor.

8. (Currently amended) The method of claim 1, further comprising ~~the steps of~~:

determining, based on the information received on behalf of the second processor, information about a firewall that selectively restricts a flow of information into the first processor; and

providing, by the at least one additional processor, to the firewall the determined information such that information flowing from the second processor to the first processor on the enabled one or more tunnels is allowed by the firewall into the first processor.

9.   (Currently amended)   The method of claim 1, further comprising ~~the steps of~~:

determining information about a first local network connected to the first processor based on the information received on behalf of the second processor and information about a second local network connected to the second processor based on the information received on behalf of the first processor, wherein each local network includes one or more other processors separate from the at least one additional processor;

providing by the at least one additional processor to the first processor the information regarding the local network connected to the second processor and to the second processor the information regarding the local network connected to the first processor;

establishing, by the first processor, one or more tunnels from the first processor to the second processor using the first and second virtual addresses; and

enabling communications between the one or more other processors in the first local network and the one or more other processors in the second local network using the information about the first and second local networks.

10. (Currently amended) The method of claim 1, further comprising ~~the steps of~~:

determining information about a first local interface for the first processor based on the information received on behalf of the second processor and information about a second local interface for the second processor based on the information received on behalf of the first processor;

providing by the at least one additional processor to the first processor the information about the second local interface for the second processor and to the second processor the information about the first local interface for the first processor; and

establishing, by the first processor, one or more tunnels from the first processor to the second processor using the first and second virtual addresses and the information about the first and second local interfaces.

11. (Currently amended) The method of claim 1, further comprising ~~the steps of~~:

determining cryptographic information for the first processor based on the information received on behalf of the second processor and cryptographic information for the second processor based on the information received on behalf of the first processor;

providing by the at least one additional processor to the first processor the cryptographic information for the second processor and to the second processor the cryptographic information for the first processor; and

establishing, by the first processor, one or more tunnels from the first processor to the second processor using the first and second virtual addresses and the cryptographic information for the first and second processors.

12.   (Currently amended) A system for enabling a network between a first processor and a second processor each identifiable by a name, the system comprising:

means for receiving on behalf of the first processor, information that includes the name of the second processor;

means for receiving on behalf of the second processor, information that includes the name of the first processor;

means for determining a first virtual address for the first processor based on the information received on behalf of the second processor and a second virtual address for the second processor based on the information received on behalf of the first processor, such that the first and second virtual addresses uniquely identify the first and second processors, respectively, and are routable through the network; and

means for providing to the first processor the second virtual address and to the second processor the first virtual address to enable one or more tunnels between the first and the second processors.

13.   (Original)   The system of claim 12, wherein each of the names includes a first portion and a second portion.

14.   (Original)   The system of claim 12, further comprising:

means for establishing a tunnel between the first processor and the system to communicate information between the first processor and the system.

15. (Currently amended) A system for enabling a network between a first processor and a second processor, wherein the first and second processors are separate from said system and are each identifiable by a name, said system comprising:

a tunneling interface that receives, on behalf of the first processor, information that includes a name of the second processor, and receives, on behalf of the second processor, information that includes the name of the first processor; and

a controller that determines a first virtual address for the first processor based on the information received on behalf of the second processor and a second virtual address for the second processor based on the information received on behalf of the first processor such that the first and second virtual addresses uniquely identify the first and second processors, respectively, ~~and are routable through the network,~~ and provides to each of the first and second processors the first and second virtual addresses to enable one or more tunnels between the first and the second processors.

16. (New) The method of claim 1, wherein the determining comprises:

determining, by the at least one additional processor, the first virtual address for the first processor based on the information received on behalf of the second processor and the second virtual address for the second processor based on the information received on behalf of the first processor, such that the first and second virtual addresses uniquely identify the first and second processors, respectively, and are routable through the network using the one or more tunnels.

17.   (New) The system of claim 12, wherein the determining means determines the first virtual address for the first processor and the second virtual address for the second processor such that the first and second virtual addresses uniquely identify the first and second processors, respectively, and are routable through the network using the one or more tunnels.

18.   (New) The system of claim 15, wherein the controller determines the first virtual address for the first processor and the second virtual address for the second processor such that the first and second virtual addresses uniquely identify the first and second processors, respectively, and are routable through the network using the one or more tunnels.